## ABSTRACT OF THE DISCLOSURE

A combined fluid-air evaporator having at least two separate duct systems is described, through which separate material flows may be conducted, at least one of the two duct systems having a free surface which may be brought into thermal contact with an air flow, and the at least two duct systems being at least partially in thermal contact with one another. Furthermore, a ventilation arrangement for a building is described using the combined fluid-air evaporator, in which a used air flow directed out of the building, which is in thermal contact with an outside air flow via an air-air heat exchanger, comes into thermal contact with the combined fluid-air evaporator, through which a refrigerant and an exothermic fluid pass, the refrigerant circulating in the loop of a heat pump, whose condenser is connected downstream in the flow direction from the air-air heat exchanger in the heated outside air flow, and the exothermic fluid circulates in the loop of a heat accumulator system.